

Abstract

Continuous method for the production of a pigment masterbatch

- 5 The invention relates to a method for the production of a pigment masterbatch by extrusion, wherein
- a) a thermoplastic polymer in granular or powder form is metered continuously into a twin-screw extruder;
 - b) the polymer metered in is melted in the extruder;
 - 10 c) a pumpable pigment press cake containing pigment, water and/or organic solvent is metered continuously into the molten polymer through an inlet port of the extruder under elevated pressure, the pressure being sufficiently high that the boiling point of the water and/or organic solvent is higher than the internal temperature of the extruder in the region of this inlet port;
 - 15 d) optionally a flow improver is added;
 - e) the pigment is dispersed into the molten polymer from the press cake by the action of shear forces;
 - f) the water and/or organic solvent are removed through at least one outlet port of the extruder, under elevated pressure, the pressure being
 - 20 sufficiently high that the boiling point of the water and/or organic solvent is higher than the internal temperature of the extruder in the region of this outlet port;
 - g) the pigmented polymer melt is discharged from the extruder, cooled and granulated.